

PUBLICATION NUMBER : 10288057  
 PUBLICATION DATE : 27-10-98

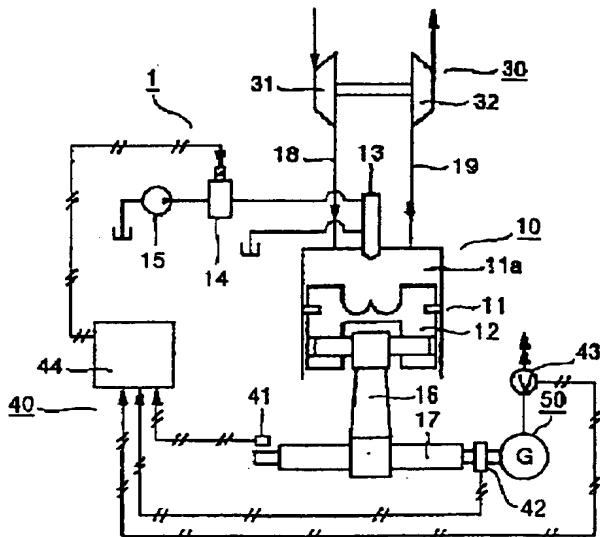
APPLICATION DATE : 16-04-97  
 APPLICATION NUMBER : 09114483

APPLICANT : KOMATSU LTD;

INVENTOR : WATANABE SHINZO;

INT.CL. : F02D 23/02 F02B 37/00 F02D 29/06  
 F02D 41/40 H02P 9/04

TITLE : FUEL INJECTION DEVICE FOR  
 ENGINE PROVIDED WITH  
 SUPERCHARGER, AND CONTROL  
 METHOD THEREOF



**ABSTRACT :** PROBLEM TO BE SOLVED: To prevent the generation of speed-down of engine when a load is suddenly applied to an engine at the time of high-idling and in the case where a load exceeds the predetermined threshold value by utilizing rotating speed of a supercharger, which is previously increased, so as to supply a large quantity of air, and increasing the output torque of the engine.

**SOLUTION:** When an engine 10 is started and rotated at a non-load high- idling engine speed, a controller 44 receives a signal from an engine speed sensor 41, and adjusts the opening and closing time of an actuator 14 so as to delay the fuel ignition time. In this condition, a detection that a sudden increase of a load is generated in a motor 50 or not is performed, and in the case of YES, opening and closing time of the actuator 14 is adjusted by the controller 44 so as to be opened at the time of rated outputting. With this structure, fuel injection quantity to be injected into a cylinder 11 is increased to the maximum injection quantity, and the exhaust gas temperature is raised so as to raise the revolution of a turbine 32 more, and the air supplied quantity into the cylinder 11 is increased so as to increase the output torque.

COPYRIGHT: (C)1998,JPO